Wyoming Grade 8

# FlyBy Math<sup>™</sup> Alignment to Wyoming Mathematics Content and Performance Standards Adopted July 7, 2003

#### **Content Standard 1: Number Operations and Concepts**

Students use numbers, number sense, and number relationships in a problem-solving situation.

#### **Benchmark**

3. Students explain their choice of estimation and problem-solving strategies and justify results in problem-solving situations involving rational numbers.

## FlyBy Math<sup>TM</sup> Activities

--Explain and justify solutions regarding the motion of two airplanes using the results of plotting points on a schematic of a jet route, on a vertical line graph, and on a Cartesian coordinate system.

#### **Content Standard 2: Geometry**

Students apply geometric concepts, properties, and relationships in problem-solving situations.

#### **Benchmark**

4. Students communicate the reasoning used in identifying geometric relationships in problem-solving situations appropriate to grade level.

#### FlyBy Math<sup>TM</sup> Activities

--Explain and justify solutions regarding the motion of two airplanes using the results of plotting points on a schematic of a jet route, on a vertical line graph, and on a Cartesian coordinate system.

## **Content Standard 4: Algebra**

Students use algebraic methods to investigate, model, and interpret patterns and functions involving numbers, shapes, data, and graphs in a problem-solving situation.

	Benchmark	FlyBy Math <sup>TM</sup> Activities
	3. Students evaluate algebraic expressions and formulas given integer values for variables.	Use the distance-rate-time formula to predict and analyze aircraft conflicts.
	4. Using simple linear equations, students create a table, and graph the solutions on the coordinate system.	Represent distance, speed, and time relationships for constant speed cases using linear equations and a Cartesian coordinate system.

## **Content Standard 5: Data Analysis and Probability**

Students use data analysis and probability to analyze given situations and the results of experiments.

#### **Benchmark**

1. Students systematically collect, organize, and describe, analyze, and represent data using tables, charts, diagrams, and graphs.

## FlyBy Math<sup>TM</sup> Activities

- --Conduct simulation and measurement for several aircraft conflict problems.
- --Represent distance, rate, and time data using tables, line plots, bar graphs, and line graphs.